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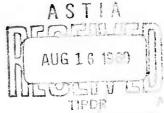
eadership In Army Infantry Platoons:

Study II

ASTIA

by

Carl J. Lange and T.O. Jacobs



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U.S. Army Infantry Human Research Unit Fort Benning, Georgia

Under the Technical Supervision of

The George Washington University
HUMAN RESOURCE & RESEARCH OFFICE
operating under contract with
THE DEPARTMENT OF THE ARMY

## LEADERSHIP IN ARMY INFANTRY PLATOONS: STUDY II

Ьу

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Research Report 5 July 1960 Tosk OFFTRAIN III

#### COMPOSITION OF RESEARCH TEAM

Dr. Carl J. Lange served as Task Leader. Dr. T.O. Jacobs took part in planning the research, collecting and analyzing the data, and preparing the report. Pvt. F.T. Flynn and Pvt. C.E. Stockton assisted in the research during various stages of the data collection and analysis.

The planning and data collection phases of this studywere conducted at the U.S. Army Leadership Human Research Unit under the general direction of Dr. Howard H. McFann as Director of Research. During the analysis phase, Task OFFTRAIN was transferred to the U.S. Army Infantry Human Research Unit, where the analysis was completed and the report was written.

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This is the second in a series of related studies of leadership in Army platoons. In the previous study, leadership was conceptualized in terms of a social learning process. Specific, observable behaviors of platoon leaders, within a range of situations relevant to group goals, were selected for study. The object was to identify the actual day-to-day, on-the-job leader behaviors which distinguish between effective and ineffective platoon leaders. The over-all goal was to use knowledge of these leader behaviors to develop effective leader training procedures.

The goal of the present study was to develop and try out the Leader Activities Questionnaire (LAQ), a paper-and-pencil measure of the leader behaviors identified in the earlier study. The LAQ was planned for use in follow-ups after experimental training to determine the extent to which the actual on-the-job behaviors of platoon leaders had been favorably modified. If the LAQ proved adequate as a measure of these variables, it would be considerably more economical to use than the interview methods of the earlier study.

The internal consistencies of the LAQ leader behavior variables were found to be satisfactory in most cases. Further, for most variables there was satisfactory agreement among platoon members with regard to the behavior descriptions they gave of their platoon leaders.

The validities of the leader behavior variables measured by the LAQ were compared with the validities of parallel variables in the earlier study. Substantial agreement was found. On the basis of these results, it was concluded that the LAQ is satisfactory for the purpose for which it was constructed. It measured acceptably well those leader behavior variables it was designed to measure.

The agreement found between the validities obtained in Study II and in the earlier study also has important implications for leadership training. To a substantial extent, the leader behavior variables found to be associated with judgments of leadership effectiveness were the same in both studies, although the samples were of different natures. This constitutes a cross-validation of the earlier findings, and increases the confidence with which these findings can be used as a basis for training platoon leaders.

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## LEADERSHIP IN ARMY INFANTRY PLATOONS: STUDY II

#### Chapter 1

#### THE RESEARCH PROBLEM

This report deals with the second in a series of studies of leadership in infantry platoons. The ultimate goal is to develop methods for teaching effective leadership skills to junior officers, such as platoon leaders. The purpose of the first study in this series was to provide information on the actual day-to-day, on-the-job leadership behaviors which distinguish between effective and ineffective infantry platoon leaders. The purpose of the present research was to develop and validate a Leader Activities Questionnaire (LAQ) for measuring the leader behavior variables identified in Study I.

A third study is planned which will apply the findings of this and the earlier study to research on experimental methods of leadership training.

In Study I, the methodology was designed to provide measures of specific, observable behaviors of the leader within a range of situations relevant to group goals. Interviews with platoon members were used to obtain descriptions of platoon leader behaviors involving interaction with followers in situations bearing on goal attainment. The behavior variables derived from these descriptions were correlated with the primary criterion, ratings of leader effectiveness by subordinates, and also with ratings of leader effectiveness by superiors.

In deriving behavior variables from the descriptions obtained in interviews, steps were taken to obtain measures which were directly tied to observations of specific behaviors. Only actual incidents reported as occurring in specific situations were retained for scoring; inferential and evaluative material was removed from interview protocols before they were scored. The behavior descriptions were translated into quantitative scores by applying explicitly defined operations. A basic assumption was that the obtained frequency distribution of reported occurrences of a given behavior for the sample of leaders studied, corrected by the total amount of behavior reported for each leader, would correlate highly with the frequency distribution of actual occurrences of the behavior for the sample over a specified time period.

<sup>1</sup>Carl J. Lange et al., A Study of Leadership in Army Infantry Platoons, HumRRO Research Report 1, Washington, November 1958. This research, commonly referred to in this report as Study I, was conducted at the U.S. Army Leadership Human Research Unit, Presidio of Monterey, Calif.

This approach to the study of leader behavior in group goal-relevant situations also had the important advantage of <u>not</u> limiting the range of behaviors studied, as do instruments such as structured questionnaires which define the content of the observations to be made.

The leader behavior variables were classified into eight main areas: defining, pre-task motivation, post-task motivation, general motivation, handling disruptive influences, getting information, NCO use and support, and other (miscellaneous) leader behaviors. Most of the variables were measured by the reported frequency of communicative acts by the leader. These acts were usually in reference to the performance of group members. It was a working assumption of the study that the cumulative effect of communicative acts in goal-relevant situations would modify group performance primarily by modifying the capability and motivation of the group.

Many of the leader behavior variables were significantly related to ratings of perceived effectiveness. Although the details are too extensive to summarize here, some of the general findings were:

(1) The effective leader clearly and consistently emphasizes performance as the basis for reward and punishment.

(2) Punishment is used by the effective leader both instructively and for motivational failure.

(3) The effective leader clearly indicates the standards desired, and provides precise information about needed improvement when reacting to below-standard performance.

These findings were consistent with a social learning analysis of the leadership process. Very briefly, according to this analysis the defining acts of the leader transmit information about goals and paths to goals, and the motivating acts build up generalized expectancies on the part of followers that performance will result in functionally related rewards and punishments.

The next step in the research program was to develop training materials, and then conduct controlled studies in leadership training to determine the extent to which various methods are successful in teaching platoon leaders the effective leader behaviors identified in the earlier study.

Before this research could be done, however, it was necessary to devise a method for obtaining measures of leader behavior to avaluate the effects of such training. The method of Study I had to be rejected. Although excellent, particularly when all the variables relevant to the research program were not yet identified, it was time-consuming and expensive, too much so for continued application. Since a questionnaire approach seemed most economical of time and effort, it was selected as the method for collecting the required leader behavior data. Consequently, the purpose of Study II was to build a Leader Activities Questionnaire to measure the behavior variables identified in the earlier study.

<sup>&</sup>lt;sup>1</sup>For definitions of these areas as they were used in the present study, see Chapter 2. In Study I, general motivation variables were combinations of pre-task and post-task motivation variables; these combinations were not made in Study II.

The research most closely related to Studies I and II is perhaps that of the Ohio State Leadership Studies. A careful integration of this prior work and the present research is not considered appropriate for this report. However, some characteristics of the OFFTRAIN methods which differ from the prior work may be pointed out. In the present research, the initial method used for developing leader behavior categories permitted a close interaction between guiding theoretical ideas and actual observation of leader behavior. While the open-end questions were structured to the extent of eliciting responses relating to leader behavior in interaction with followers in goal-related situations, the content of leader behavior was not predetermined by the researcher beyond this degree of structure. The theoretical ideas guiding the studies suggested the importance of leader behavior in the defining and pre- and post-task reward and purishment areas, but, again, the specific content of these variables was derived from actual responses. Hence, the steps followed in this study series led to the development of a questionnaire with items derived from systematic analysis of observations of leader behavior collected from a sample of the particular groups of interest.

The work of this study was divided into two phases. The first phase was the development of the Leader Activities Questionnaire (LAQ). The findings of Study I defined its content; items were prepared to measure the obtained leader behavior variables as closely as possible. The second phase was the validation of the LAQ. In this phase, the first question was whether the LAQ actually measures the same leadership skills, or variables, measured in Study I. Was the attempt to construct a questionnaire that would do the work of the interview successful? In addition, the LAQ had to be examined to determine the reliability with which each of the variables was measured.

¹Ralph M. Stogdill and Alvin E. Coons (eds.), Leader Behavior: Its Description and Measurement, Research Monograph Number 88, Bureau of Business Research, College of Commerce and Administration, The Ohio State University, Columbus, 1957.

#### Chapter 2

#### DEVELOPMENT OF THE LEADER ACTIVITIES QUESTIONNAIRE

The first step in developing the Leader Activities Questionnaire was to determine which of the behavior variables identified in Study I were to be measured. It was evident that all or almost all of these variables should be included, regardless of the extent to which they had correlated with the criterion variables in the earlier study, that is, leader behavior variables should not be, and were not, eliminated because they had failed to show significant relations with the criteria. However, some variables were eliminated because behaviors for them had been reported very infrequently.

In addition to items prepared to measure the variables identified in the first study, items were prepared to measure other variables suggested by the results of the earlier research. These additional variables were oriented primarily to providing a finer breakdown of the measures related to the type of punishment administered and the conditions under which it was administered.

The LAQ items consisted of statements describing behaviors that, according to the procedures of the earlier study, would have been classified into the respective categories of leader behavior that they were intended to measure—for example, "He told you he wanted you to do a good job" (intangible pre-task motivation), "He pulled a man's pass for fouling up an important job" (tangible post-task motivation). In the LAQ the items were presented in groups dealing with a platoon leader's behavior in a given situation, described in a short paragraph at the beginning of each group. For each item the respondent was asked to indicate how frequently that particular behavior had been observed to occur during the last month, using the following response scale:

Never	Once	Two or Three Times	Four or Five Times	Several Times	Many Times
0	1	2	3	4	5

For data analysis, the 243 behavior statements were regrouped to obtain measures of 53 different variables. The median number of items per variable was 3.5, with a range from one to 15.

These variables were arranged in six broader behavior areas, corresponding to functional boundaries in the interactions between the

leader and his men, and an additional miscellaneous behavior area. The seven areas may be briefly defined as follows:

Area I: Defining. Through these behaviors the platoon leader imparts information and initiates action. They include such behaviors as assigning tasks, instructing platoon members as to how the tasks are to be done, and clearly indicating the expected standards of performance.

Area II: <u>Pre-Task Motivation</u>. These are behaviors designed primarily to induce subordinates to want to do good work. They are both positive (appealing for good performance) and negative (warning against poor performance). The leader may or may not offer tangible—that is, material—rewards or punishments.

Area III: Post-Task Motivation. This area includes the rewards and punishments, either tangible or intangible, that a platoon leader gives his men for their performance on assigned tasks. In addition, the area includes certain types of behavior judged to be appropriate reactions to performance, and some judged to be inappropriate.

Area IV: Handling Disruptive Influences. This area includes those behaviors of the platoon leader oriented toward helping his subordinates to handle problems which are not work-related but which would interfere with their work performance if allowed to persist.

Area V: Getting Information. The behavior variables in this area are concerned with the platoon leader's actions in getting information from his platoon as to how and why a given work performance occurred and how given tasks should be done. These behaviors in large part form the basis for the platoon leader's actions in dispensing rewards and punishments, and aid him in making other decisions about his platoon and his men.

Area VI: NCO Use and Support. These variables are concerned with (a) the extent to which the platoon leader supports the decisions of his NCO's and (b) the extent to which he delegates work assignment to them rather than assigning tasks to the platoon himself.

Area VII: Other Leader Behaviors. These variables could not be grouped under the preceding areas for one or both of two reasons, depending on the variable concerned: Some items are not specific statements of concrete behaviors and/or relate not to a given work-oriented subdivision of leader behavior, but rather to an activity which is not related to a particular context. It is a heterogeneous group.

#### Chapter 3

#### THE VALIDATION STUDY

DESIGN

The main objective of this research was to determine how well the LAQ measures the leader behavior variables identified in Study I. A rigorous experimental design for this purpose would have required the use of the interview approach, on the one hand, and the questionnaire, on the other hand, to gather data from the same platoons about the same leaders. This type of design would have permitted direct comparison of the results of the two methods. However, such a design could not be used because the collection and analysis of interview data would have been prohibitively time-consuming.

The most practical alternative was to replicate the first study, using the LAQ rather than interviews to collect the data. This would not permit direct comparisons of the two techniques on the same sample. However,  $comparison^1$  of the two sets of data would provide evidence concerning the similarity of results obtained by the two methods. If the findings of the first study were closely substantiated, the conclusion could reasonably be drawn that the questionnaire method was measuring the original leader behavior variables. The disadvantages of the design were: (1) The problem of quantifying the similarity has only crude solutions. (2) If the results of the first study were not substantiated, explanations for the failure might lie in differences between the two samples used.

The LAQ was administered to several men in each of a number of platoons. Their responses were used to determine the frequency with which their respective platoon leaders engaged in each of the 53 different types of behavior covered by the questionnaire. These platoon members were also asked to fill out rating instruments which yielded three criterion measures by subordinates (described bclow). In addition, a criterion rating of each platoon leader was obtained from his company commander. For each of the 53 behavior variables, the LAQ scores describing the platoon leaders were correlated with the four criterion scores.

Discussion of these results by behavior areas, in Chapter 4, comprises the main body of the findings. In addition, the results of

For a description of the procedure actually used, see Chapter 5, "Comparison of the Results of Study II With Study I."

some attempts to quantify the similarity of the findings of Study II with Study I are presented in Chapter 5. It will be seen that the results of the present study seem to be generally consistent with the previous set of results and that the quantitative comparison substantiates this interpretation.

#### CRITERION MEASURES

Four criterion measures were obtained:

C-1. Subordinates' Rating of Platoon Leader. On this form, each platoon member in the sample rated his platoon leader on a scale from one to six on three items: how good he was judged to be as an all-around leader of the platoon, how well he handled emergencies, and how the respondent would feel about going into combat with him.

C-2. Subordinates' Rating of Platoon. This also was a threeitem form, on which respondents rated their platoons from one to seven. Items judged were how much the platoon was judged to be "on the ball," the reputation of the platoon, and how good the platoon would be in combat.

C-3. Subordinates' Belongingness Questionnaire. This instrument contained seven items with four-point response scales. The items dealt with platoon member interrelationships—for example, how the respondent thought he stood with the other platoon members, and how often other members of the platoon talked to the respondent about their problems.

C-4. Superior's Rating of Platoon Leader. This instrument contained 23 items. (Eight of these were not scored because their content was specific and directly relevant to the content of some LAQ items.) Response scales for most items contained four points, but a few contained more. Content of some items was specific (e.g., ability to plan and schedule work and problem-solving ability), while others were general (e.g., general rating on performance of duty and over-all value to service).

The first, second, and fourth criteria were adapted directly from the measures used in the first study. The Subordinates' Rating of Platoon Leader (C-1) was thought to be a reflection of the degree to which the platoon leader was accepted as a leader by the platoon members. This probably is an intermediate criterion of how willingly the platoon members would follow their leader into a stressful situation such as combat. The Superior's Rating (C-4) was thought to reflect how well the platoon leader was considered to be doing his assigned duties, and also the general performance level of the platoon. The Subordinates' Rating of Platoon (C-2) was used to obtain platoon members' judgments on their platoon's over-all standard of excellence.

The rationale for the Subordinates' Belongingness Questionnaire (C-3) was that the items would measure the internal cohesiveness of

'It was originally proposed that platoon proficiency test scores would also be obtained and used as a criterion measure. However, these scores were not available for the units from which data were collected.

the platoon and would, therefore, reflect the extent to which the platoon leader had succeeded in promoting mutual interdependence and cooperation among the platoon members.

#### RESPONDENTS

The LAQ and the criterion measures were administered to a total of 257 members of 46 platoons at Fort Riley, Kansas, during the period 13-30 January 1959. These men held the highest noncommissioned ranks in their respective platoons, insofar as the ranking members were available. The sample of platoons represented all those available at the time of testing that (1) had a platoon leader and (2) could furnish a minimum of three members who had known their platoon leader at least one month.

The 46 platoons in the sample were obtained from three battle groups of a division in training for a move to Europe. At the time of testing all three battle groups had completed the eight weeks of Basic Combat Training. In addition, battle group "A" had completed three weeks of Advanced Individual Training, and battle group "B" was in the eighth (last) week of that course. Battle group "C" had completed all 16 weeks of Basic and Advanced Individual Training and was in its second week of Basic Unit Training. Since formal training in tactics at the platoon and squad level is not given before Basic Unit Training, it is apparent that the platoons in Study II had not had nearly as much opportunity for functioning in the field as operating platoons as had those in Study I. This is particularly true of the platoons from battle groups "A" and "B," which had not functioned tactically as platoons on any field problems at all.

Because they had had less opportunity to become familiar with their platoon leaders than had the subjects in Study I, all platoon members were screened before taking the LAQ. If they had known their platoon leader less than one month, they were excluded from the sample. Further, the platoon members requested for the experiment were the ranking NCO's. These, in a sense, were cadre and were likely to be the men who interacted more frequently with the platoon leaders than did the other platoon members. Where NCO's could not be obtained in sufficient number, acting NCO's were substituted. By selecting ranking NCO's as respondents whenever possible, it was hoped that the sample would include those platoon members having the greatest knowledge of their respective platoon leaders.

One possible undesirable effect of this selection procedure was that respondents at different rank levels within a platoon might regard the same platoon leader behaviors differentially, one approving and another disapproving, so that the same behavior might lead a sergeant to think well of the platoon leader and a corporal to think harshly of him. That this actually was the case can be discounted. Data on item favorabilities were collected at Fort Riley from respondents of the same type as those used in this study. Although the results of analysis of these data will not be given in detail in this report, it is important to

note that the item-favorability ratings obtained from sergeants correlated .97 with those obtained from platoon members ranking below sergeant. These two groups apparently have the same values with regard to platoon leader behavior, insofar as the LAQ items are concerned.

#### PROCEDURE FOR DATA COLLECTION

The procedure varied somewhat from one battle group to another, as training requirements dictated when troops were available. In all but one testing session, however, groups of platoon sergeants and other platoon members were physically separated because one set of items on the platoon members' forms referred to the platoon sergeant. In the one exception, platoon sergeants were tested in the same large room with the others, although they were separated into two groups in that room. Company commanders were interviewed either individually or in a group, at their convenience. Platoon Leader Ratings were obtained from them during the interview if possible; but those who preferred to do the ratings after duty hours because of work commitments were permitted to do so.

The research staff member conducting the testing session repeated a standard introductory statement to each group. The essential elements of the statement were that the experimenter was a civilian working on research for the Army, and that the test results were to be held in confidence, that is, no person in the Army would ever see specific results. Thus, the platoon members' individual reports could neither help nor hurt their platoon leaders or themselves. The nature of the research was very briefly stated and their honest support solicited.

After allowing time for questions, the experimenter handed out the LAQ booklets and answer sheets and repeated a set of standard instructions. The men were given an opportunity to ask questions about the mechanics of filling out the questionnaire, after which the group was allowed to begin.

Since the rates at which the respondents filled out the LAQ varied considerably, the criterion rating booklets and answer sheets were distributed individually as the questionnaires were completed. Brief oral instructions were given to each man when he received his booklet.

#### Chapter 4

#### RESULTS

#### CRITERION ANALYSES AND RESULTS

The four criterion measures used in validating the Leader Activities Questionnaire subcategories—Subordinates' Rating of Platoon Leader (C-1), Subordinates' Rating of Platoon (C-2), Subordinates' Belongingness Questionnaire (C-3), and Company Commander Rating of Platoon Leader (C-4)—were analyzed to determine reliabilities and intercorrelations. The two sets of reliabilities shown in Table 1 are intraclass correlation coefficients. They are computed in two different ways to isolate two different effects.

Table 1
Criterion Reliabilities and Intercorrelations

	Reliabilities .		. Intercorrelations a		
Criterion	Items	Respondents	C-2 (N = 46)	C-3 (N = 46)	C-4 (N=38
-1 Subordinates' rating of platoon leader	.96	.74	.52***	.13	.38*
-2 Subordinates' rating of platoon	.92	.67		.32*	.49**
-3 Subordinates' belong- ingness questionnaire	.62	.17		.02	.31
-4 Company commander rating of platoon leader	.95	( b)		1_	•91

<sup>a</sup>N denotes number of platoons. The symbol \* indicates significance at the .05 level of confidence; \*\* at the .01 level, and \*\*\* at the .001 level.

bOnly one rater was available for obtaining company commander ratings for each platoon leader; this prohibits computation of an across-respondents reliability.

The column headed "Reliabilities—Respondents" is a determination of the extent to which platoon members agreed among themselves in rating their platoon leader, and so on. These were computed to indicate the reliabilities of average ratings, and, as such, were based on an average of 5.6 respondents per platoon. To obtain this index, the responses

<sup>1</sup>R.L. Ebel, "Estimation of the Reliability of Ratings," *Psychometrika*, vol. 16, 1951, pp. 407-424.

of individual platoon members on all the items of each criterion measure first were summed and averaged. These platoon member mean scores were then entered into an analysis of variance, and the following formula was used for computing the intraclass correlation:

 $r = \frac{\text{(Platoons mean square) minus (residual)}}{\text{Platoons mean square}}$ 

The residual was obtained by subtracting the platoons sum of squares from the total sum of squares, and then dividing the remainder by the appropriate  $\underline{df}$ . Because the raters were different in each platoon, it was not possible to exclude from the residual a component comparable to the variance between raters; this component normally would be excluded.

The column headed "Reliabilities—Items" is a determination of the extent to which the items in each of the criterion instruments are homogeneous. To obtain this index, the responses of all members of a given platoon first were added together to give item means. These item means were then used as entries into an analysis of variance which haditems along one dimension and platoons along the other dimension of a two-way classification. In this analysis, it was possible to remove both the effect of variations in item-mean levels and the variation among platoons from the total to obtain a residual. The previously given formula for computing intraclass correlations was again used.

As shown in Table 1, the items in the Subordinates' Rating of Platoon Leader (C-1), Subordinates' Rating of Platoon (C-2), and Company Commander Rating of Platoon Leader (C-4) were all remarkably consistent internally. Coefficients of .96 and .92 for the three-item instruments, and .95 for the longer Company Commander Rating form, compare very favorably with most mental tests presently in use and are probably higher than similar measures obtained from most other instruments. The items in the Subordinates' Belongingness Questionnaire (C-3) are not nearly so homogeneous, however. It may reasonably be questioned whether all the items in this instrument measure the same variable.

When the reliabilities were computed to reflect the extent of agreementamong platoon members on the three subordinates' measures, it was found that the coefficients were not as high as those indicating internal consistency among items. However, coefficients of .74 and .67 obtained for subcrdinates' ratings of platoon leader and of platoon, respectively, indicate moderately good agreement among platoon members. This is remarkable, since it was not possible to remove the effect of rater mean-level differences from the residual; that is, these coefficients must be regarded as spuriously low.

The agreement within platoons on the Belongingness measure was poor, however. Although this might be explained in terms of differential degrees of "belongingness" among the platoon members tested, the combination of the "Items" coefficient of .62 and the "Respondents" coefficient of .17 seems to indicate that this is not a trustworthy measure.

The subordinates' ratings of their platoon leaders were not as highly correlated with the company commander ratings of the platoon leader

as were their ratings of their platoons, but the difference is not significant. The subordinates' and company commanders' ratings of platoon leaders do not correlate to the same extent that was found on the first

study, .61, but that difference also is not significant.

In summary, the internal consistencies of C-1, C-2, and C-4 were high and very acceptable. In addition, the extent to which platoon members agreed with one another also was acceptable for C-1 and C-2, ratings of platoon leader and platoon. However, the internal consistency of the items in C-3, the Belongingness Questionnaire, was somewhat less than marginally satisfactory; further, there was general failure to obtain within-platoons agreement on this measure. Consequently, this instrument was not considered to be satisfactory for use as a criterion measure, and no further reference will be made to it.

#### LEADER ACTIVITIES QUESTIONNAIRE ANALYSES

#### Plan of Analysis

Forty-four of the LAQ variables are grouped under six behavior areas: Defining, Pre-Task Motivation, Post-Task Motivation, Handling Disruptive Influences, Getting Information, and NCO Use and Support. All but one of these are directly related to the performance of the platoon in achieving its goals. The exception, Handling Disruptive Influences, is indirectly related in that these behaviors are involved in solving problems of group members that otherwise would interfere with their work performance. Nine additional LAQ variables are included in a miscellaneous area termed "Other Leader Behaviors." The behavior areas are breakdowns of the platoon leader's functions in identifying work activities for the platoon and enforcing performance standards that, in turn, have been presented to him from higher command levels.

The general plan of analysis was as follows. All the responses of all the platoon members to all the items in a given category, or LAQ variable, were summed, and a mean was obtained. This mean represented the average frequency with which the platoon leader was reported to have done the specific behaviors that defined the variable. Similar means were obtained for the responses on each criterion measure. These two sets of means were then correlated, yielding for each LAQ variable three coefficients which are interpreted as validities. In addition to these criterion relationships, intraclass coefficients were obtained both over items and over platoon members (respondents) for the LAQ variables as they had been obtained earlier for the criterion measures.

The findings relating to the LAQ are presented in separate sections corresponding to the respective behavior areas. Tables showing the reliabilities of the LAQ variables and their correlations with the criteria accompany discussion sections which summarize the findings. No comparisons between the validity coefficients of this study and those of the earlier study are presented in these discussions. Following the report of the main findings relating to the LAQ, in Chapter 5-some

efforts are made to quantify the similarities between the findings of Study II and those of Study I. In a final discussion chapter, comparisons of the results from the two studies at a general, interpretative level are presented.

#### Area I: Defining

Defining behaviors are those through which the platoon leader imparts information and initiates action. They include such activities as specifying operating procedures or methods of doing specific tasks, assigning tasks, explaining why certain jobs or activities are necessary, and providing information to platoon members about the adequacy of their performance. Defining behaviors are primarily work-oriented and constitute the largest part of the overt guidance a leader gives his followers in achieving platoon goals.

The eight Defining variables are listed in Table 2. They fall into three groupings in terms of the magnitude of their correlations with the criteria. The first grouping consists of only one variable, "Defining clearly" (F), which contains items such as, "He confused you

Toble 2

Leader Behavior Variables, Area I: Defining

	Relia	abilities	Validities <sup>a</sup>			
			Subordinates' Ratings		Superior's	
Variable	ltems	Respondents	Of Platoon Leader (C-1, N=46)	Of Platoon (C-2, N=46)	Rating of Platoon Leader (C-4, N=38)	
A Specifying the roles						
of new men in the						
platoon and stating			224	0.6	0.0	
platoon policies	.83	.60	.32*	.06	.03	
B Stressing observance						
of military courtesy,				00	1.5	
good appearance	.84	.61	.28	.00	.15	
Specifying how and when						
work will be evaluated	.82	.42	.12	.12	.02	
D Making expected standards		,			0.77	
of performance clear	.62	.06	.29	.15	.27	
E Assigning work at a					20	
detailed level	.64	.48	.38**	.14	.23	
F Defining clearly	.72	.99	.68***	.39**	.26	
G Critiquing good and					22	
poor performance	.89	.51	.54***	.21	.22	
H Explaining reasons						
for actions	.75	.51	.50***	.33*	.22	

aN denotes number of platoons. The symbol \* indicates significance at the .05 level of confidence; \*\* at the .01 level, and \*\*\* at the .001 level.

<sup>&#</sup>x27;Subordinates' Rating of Platoon Leader, C-1; Subordinates' Rating of Platoon, C-2; Company Commander's Rating of Platoon Leader, C-4.

when he told you what to do." Its correlation with the platoon members' ratings of their leader (C-1) was high, and it was also moderately correlated with the platoon members' ratings of their platoons (C-2).

Both "Critiquing good and poor performance" (G) and "Explaining reasons for actions" (H), the second grouping, had moderately high correlations with C-1; the latter was also significantly correlated with C-2.

The third grouping is composed of the remaining variables from

Table 2:

A Specifying the roles of new men . . .

B Stressing observance of military courtesy, good appearance

C Specifying how and when work will be evaluated

D Making expected standards of performance clear

E Assigning work at a detailed level

As a group, these variables correlate weakly with the criteria. Variable E correlates moderately with C-1, but the correlation of A with C-1 barely reaches significance, B and D only approach it, and C is not meaningfully related to the platoon-leader rating by subordinates. No other criterion relationship in this group is significant.

It is interesting to speculate why these three groups of variables correlate differentially with C-1. Apparently, little importance can be attached to the frequency with which a platoon leader engages in defining actions at the level of assigning specific tasks to specific people, although the clarity with which he does so apparently is very important. However, a great deal of importance also is attached to the frequency of such activities as "Critiquing" and "Explaining reasons for actions," which are appropriate to the platoon leader's role as an instructor within the platoon.

The by-items reliabilities, or internal consistencies, were generally acceptable. The coefficients for two of the variables in the third Defining subgroup above, were in the .60-.70 range, which is slightly below marginal acceptability. However, four of the remaining coefficients were better than .80, and the other two were between .70 and .80. The by-respondents reliabilities, which are an index of agreement within platoons, were not so high. Only one was greater than .70, and one was .06. However, it should again be noted that these coefficients are spuriously low because it was not possible to remove the over-respondents variance component from the residual, which was used in the numerator of the formula for the intraclass correlation coefficient. As a consequence, these are very definitely lower-bounds estimates.

#### Area II: Pre-Task Motivation

In addition to telling the platoon members what to do and how to do it, the platoon leader fulfills an important leadership function by motivating his followers to want to do good work. He may do this when tasks are being assigned, either by appealing for good performance or by warning against bad performance; in either case he may or may not specify tangible consequences of good or bad performance, such as passes or extra duty.

Of the four Pre-Task Motivation variables shown in Table 3, only one, "Appealing for good work performance without naming tangible rewards" (B), was significantly correlated with the subordinates' ratings (C-1 and C-2). None of these four variables was significantly correlated with the superior's rating of the platoon leader.

Table 3

Leader Behavior Variables, Area II: Pre-Task Mativation

5	Relia	Reliabilities		Validities a			
			Subordinate	es' Ratings	Superior's Rating of Platoon Leader (C-4, N=38)		
Variable	ltems	Respondents	Of Platoon Leader (C-1, N=46)	Of Platoon (C-2, N=46)			
A Promising tangible							
rewards for good	0.3		10	0.4	22		
performance	.81	.62	.18	.04	. 22		
B Appealing for good work performance without							
naming tangible rewards	.88	.49	.36*	.30*	. 20		
C Threatening specific tangible punishment for							
poor future performance	.88	.69	19	21	.06		
D Warning against bad per- formance without specifying	g						
tangible consequences	(b)	.56	12	02	03		

<sup>a</sup>N denotes number of platoons. The symbol \* indicates significance at the .05 level of confidence.
<sup>b</sup>This variable contained only one item. It was therefore impossible to compute an overitems reliability.

An examination of their distributions reveals one possible reason for the lack of significant relationships between the other three variables and the criteria. The two negative variables "Threatening specific tangible punishment for poor performance" (C) and "Warning against bad performance without specifying tangible consequencies" (D), had severely restricted ranges with low frequencies. They also were mildly skewed in the positive direction. The positive tangible motivation variable, A, was only mildly restricted in range but was somewhat more skewed than the other two. In contrast, the positive intangible variable, B, was symmetrically distributed and covered almost the entire range of values.

The reliability coefficients for the variables in this area follow the same pattern as those in the Defining area. The over-items indices are generally very acceptable, but the over-respondent coefficients are considerably lower.

In summary, the platoon leaders in this sample were reported as using negative pre-task motivation and positive tangible pre-task notivation acts relatively infrequently. Actions involving positive intangible pre-task motivation were reported much more frequently. This was the only Pre-Task Motivation variable that correlated significantly with any of the criteria. The frequency of a platoon leader's positive intangible

pre-task motivating actions was associated significantly in a positive direction with platoon members' ratings of his capability as a leader and with their evaluation of the quality of their platoon.

#### Area III: Post-Task Motivation

Another important source of motivation for platoon members to do good work is the system of rewards and punishments the plateon leader uses. As in Pre-Task Motivation, the rewards and punishments used by the platoon leader may be either tangible (such as a three-day pass or restriction to post) or intangible (such as praise or telling his men that they did poorly on a given task). Since Post-Task Motivation behaviors involving tangible rewards and punishments are likely to change the environmental status of the followers (tangible Pre-Task Motivation behaviors did not necessarily do this), theoretically it is especially important that they be administered realistically and appropriatelymore so, in fact, than is the case with intangible rewards and punishments. On the other hand, intangible rewards and punishments are likely to show higher relationships with follower ratings of platoon leader effectiveness because the range in frequency of intangible rewarding and punishing behaviors at the disposal of the platoon leader is considerably greater than that of tangible rewards and punishments. This would be the case especially in a newly formed company.

The relationships of the Post-Task Motivation variables with the criteria are shown in Table 4. All the rewarding behaviors—"Giving tangible rewards" (A), "Promising tangible rewards for completed work" (B), and "Praising menfor good work" (C)—correlate significantly with both C-1 and C-2.

Punishing behaviors show an entirely different set of criterion relationships. For variables D through K, which describe tangible punishments, one of the correlations with criteria C-1 and C-2 is significant and three approach significance, but the general picture for this group of variables is a consistently negative relationship too low to achieve significance. The probable reason for this lack of relationship is that some platoon leaders punish appropriately and some inappropriately. It is reasonable to expect that appropriate punishments are accepted by platoon members, although perhaps grudgingly, and that inappropriate punishments are strongly resented. Mixture of the two types of punishment could be expected to result in insignificant correlations with platoon leader ratings. A second possible reason for the insignificant correlations of these variables with the criteria is that their distributions were restricted in range and tended to be skewed in much the same fashion as for the negative Pre-Task Motivation variables.

The validities shown by the variables related to appropriateness of punishment for poor performance (N, Q, and R) support this interpretation. The items in all three of these are descriptions of punishing behaviors, except that a context is specified for each item. Variable N, "punishing for failure attributed to lack of motivation to do well" correlates positively with C-1 (.01 level). Variables Q and R, which deal with

Table 4 Leader Behavior Variables, Area III: Post-Task Motivation

	Relia	bilities	Validities <sup>a</sup>			
			Subordinates' Ratings		Superior's	
V ariab le	Variable Items	Respondents	Of Platoon Leader (C-1, N=46)	Of Platoon (C-2, N=46)	Rating of Platoon Leader (C-4, N=38	
Giving tangible rewards	.82	.63	.45**	.34*	.24	
3 Promising tangible rewards					- (4)	
for completed work	.90	.59	.50***	.33*	.22	
Praising man or men						
for good work	.95	.61	.35*	.30*	.25	
Giving light punishment				224	07	
for poor performance	.90	.68	27	32*	.07	
Giving heavy punishment			06	14	.08	
for poor performance	.65	.45	. 06	14	.00	
Promising light punish-	/ h)	40	18	07	.08	
ment for poor performance	( <sub>p</sub> )	.42	10	01	.00	
G Promising heavy punish-	45	.13	09	18	.02	
ment for poor performance	.47	.13	07			
H Warning of light punish-						
ment for repetition of	.74	. 58	13	20	.06	
poor performance	.17	. 55				
I Warning of heavy punish- ment for repetition of						
poor performance	.82	.61	03	16	.19	
J Total light punishment for						
poor performance (D+F+H)	.90	.71	24	28	.08	
K Total heavy punishment						
for poor performance						
(E+G+I)	.84	.54	02	18	.14	
L Blaming men for poor		_	4.7 4.4	45***	06	
performance	.91	.71	41**	47***	06	
M Blaming men in emotional						
or aggressive manner for			46**	<b>23</b>	.12	
poor performance	.84	. 77	40	←, 20	.12	
N Punishing for failure						
attributed to lack of	.38	.41	.42**	02	.08	
motivation to do well	.30	.71				
O Requiring correction of	.70	.47	09	17	.12	
work done incorrectly	.10					
P Giving constructive extra duty	(b)	.47	08	12	.06	
Q Giving inappropriate or	,					
excessive punishment	.73	.57	45**	39**	.08	
R Failing to base rewarding-						
punishing action on			40			
work performance	.69	. 30	54***	34*	.11	
S Punishing privately vs.			404 444	20	03	
punishing publicly	.36	.46	.48***	.20	03	

aN denotes number of platoons. The symbol \* indicates significance at the .05 level of confidence;

\*\* at the .01 level, and \*\*\* at the .001 level.

bThis variable contained only one item. It was therefore impossible to compute an overitems reliability.

reward or punishment which is inappropriate to the context described, correlate negatively with ratings of platoon leader at about the same magnitude that N correlates positively. In addition, they also correlate negatively with C-2 (.01 level and .05 level, respectively). Apparently punishment for failure is not regarded adversely when the context is

such that the appropriateness of the punishment is defined.

Another important set of relationships with criteria C-1 and C-2 is found in the variables dealing with intangible negative reinforcement (L and M). Most of the behavior items in L, "Blaming men for poor performance," are actions that either shame a man or imply that he should be personally blamed for inadequate performance. The actions under variable M are similar except that emotionality and agressiveness are also involved. Both types of behavior are related to low ratings of leadership ability; those in I are also related to low ratings of the platoon. The relationship between variable S, "Punishing privately vs. punishing publicly," and C-1 is also relevant here. The magnitude of the relationship is the same as those of L and M with C-1, but the direction is reversed, as it logically should be. The actions described in S are punishing actions, but are administered privately. It may be hypothesized that all three of these variables are related to the extent to which the platoon leader jeopardizes the peer standing of the punished man through the punishment he gives. To the extent that he does so, he will tend to be rejected as a capable leader by all his followers.

The internal consistencies over items in the Post-Task Motivation area are acceptable, with three exceptions. These are G, "Promising heavy punishment for poor performance" (.47), and two variables which relate to giving punishment appropriately or under appropriate conditions, N and S (.38 and .36). The agreement within platoons on these three variables also was low (.13, .41, and .46). In addition, the withinplatoons agreement was low on five other variables. Four of these, E, F, O, and P (.45, .42, .47, .47), relate to the use of tangible punishment, and the fifth, R (.30), relates to the appropriateness of punishment. It may be hypothesized that the low agreement within platoons on the tangible-punishment variables is due to the distributions of these variables, which were strongly skewed in the positive direction and had restricted ranges. However, this explanation would not hold for the variables relating to appropriateness of reward or punishment (N, S, R); these distributions had only slightly restricted ranges and were not strongly skewed.

In summary, all three Post-Task Motivation variables involving rewards are positively and significantly associated with high ratings by platoon members, both of their platoon leaders and of their platoon. On the other hand, it seems that mere frequency of behaviors involving tangible punishment is not meaningfully related to the criteria. However, when context is specified, frequency of appropriate punishment correlates positively with C-1, although not with C-2, at the same level as does the frequency of rewarding behaviors; and the frequency of inappropriate punishment correlates at about the same magnitude in the negative

direction with both C-1 and C-2.

#### Area IV: Handling Disruptive Influences

Disruptive influences theoretically should have a very important effect on the performance of the platoon. Disruptive influences are defined as strong personal needs of platoon members, not directly connected with the work at hand. Examples are hunger, thirst, fatigue, unfair treatment by someone not in the platoon's chain of command, excessive use for details, and problems at home. It is hypothesized that such influences will set up sufficiently strong extraneous need-states that platoon members will, to some extent, be incapacitated for good performance on assigned tasks. Platoon leader behaviors that tend to reduce these need-states should be significantly related to ratings both of the capability of the leader and the performance capabilities of the platoon itself.

Table 5

Leader Behavior Variables, Area IV: Handling Disruptive Influences

		Reli	abilities	Validities *			
		Items		Subordinates' Ratings		Superior's	
	valtable		Respondents	Of Platoon Leader (C-1, N=46)	Of Platoon (C-2, N=46)	Rating of Platoon Leader (C-4, N=38)	
A	Maintaining welfare of men	.92	.60	.59***	.36*	.25	
В	Taking action on prob- lems and complaints	.88	.50	.77***	.43**	.38*	
С	Protecting men from unfair treatment or excessive details	.71	.50	.69***	.36*	.25	
)	Helping men in diffi- cult work situation	.39	.55	.72***	.43**	.28	

<sup>&</sup>lt;sup>4</sup>N denotes number of platoons. The symbol \* indicates significance at the .05 level of confidence; \*\* at the .01 level, and \*\*\* at the .001 level.

The relationships shown in Table 5 confirm these predictions. The platoon leaders who protected their men from disrupting influences and took action to solve their problems were highly rated, and so were their platoons. The relationships of these variables with C-1 and C-2 are more consistently high than those found in any other behavior area.

All the over-items internal consistencies were acceptable except for variable D, "Helping men in difficult work situation." However, the index of agreement within platoons was acceptably high for that variable, as well as for the other three. The interpretation may be made that the items in variable D actually do not all measure the same variable, although platoon members seem to agree on responses to the items.

In summary, all the variables in this area were significantly correlated with both ratings by platoon members. The magnitude of the correlation coefficients leads to the interpretation that this is one of the most important areas measured.

#### Area V: Getting Information

The Getting Information variables listed in Table 6 differ from those in the preceding behavior areas in that their criterion relationships are probably indirectly determined, at least in part. The process of getting information from subordinates probably influences their ratings of the platoon leader through its rewarding aspect. However, this process also provides the platoon leader with information needed for taking appropriate actions of the type discussed under the areas of Defining, Pre- and Post-Task Motivation, and Handling Disruptive Influences. When placed in the framework of these behaviors, it becomes apparent that informationgetting activities must be critically important determiners of the success with which a platoon leader exercises his leadership function.

Leader Behavior Variables, Area V: Getting Information

	Reli	Reliabilities		Validities <sup>a</sup>			
			Subordinates' Ratings		Superior's		
Variable	Items	Respondents	Of Platoon Leader (C-1, N=46)	Of Platoon (C-2, N=≰€)	Rating of Platoon Leader (C-4, N=38)		
A Getting background							
information from new men	.83	.50	.48**	.27	.18		
B Checking reason for fail-							
ure to perform assigned							
work	.73	.34	.30*	08	.08		
C Checking performance of							
men on assigned tasks	.88	. 48	.51***	.36*	. 10		
D Asking NCO's for							
information or advice	.08	.01	.36*	.23	.10		
E Asking men who are not							
NCO's for information		•					
or advice	.73	.26	.37*	. 20	.44**		
F Discussing tasks with NCO's before deciding							
how they should be done	(b)	.47	.52***	.46**	. 25		

aN denotes number of platoons. The symbol \* indicates significance at the .05 level of confidence; \*\* at the .01 level, and \*\*\* at the .001 level.

DThis category contained only one item. It was therefore impossible to compute an over-

items reliability.

The criterion relationships shown in Table 6 confirm the hypothesis that information-getting activities are importantly related to the extent to which platoon leaders are rated as capable by their subordinates. All six variables are significantly correlated with C-1.

It is of further interest that two of these variables, "Checking performance of men on assigned tasks" (C) and "Discussing tasks with NCO's before deciding how they should be done" (F), are also significantly related to platoon members' ratings of their platoons (C-2), and that "Asking men who are not NCO's for information or advice" (E) correlates very significantly with superiors' ratings of platoon leaders (C-4)—more highly, in fact, than does any other variable in any area.

The frequency of significant criterion relationships in this area contrasts sharply with the observation that the indices of within-platoons agreement were, on the average, lower than in any of the preceding areas. On the other hand, with one exception, all the over-items internal consistency coefficients were moderately good to good. One interpretation of these results is that the platoon leaders who frequently sought information of various kinds might have been selective in their choice of information sources, to the extent that some respondents were unaware that information-getting activities were going on.

In summary, all the variables in this area were significantly correlated with C-1, and three additional significant relationships were found with the other two criteria. However, the low indices of within-platoons agreement suggest that the real importance of these variables may not have been reliably determined.

#### Area VI: NCO Use and Support

The correlations shown in Table 7 must be interpreted with caution because of their very low indices of agreement within platoons and their low internal consistencies. Insofar as interpretations may be made, it seems that the manner in which the platoon leader delegates work-assigning and other activities—using chain of command, B, or personally, C—is not significantly related to his followers' rating of his leadership ability.

Table 7

Leader Behavior Variables, Area VI: NCO Use and Support

	Relia	Reliabilities		Validities a			
			Subordinates' Ratings		Superior's		
V ariable	Items		Of Platoon Leader (C-1, N=46)	Of Platoon (C-2, N=46)	Rating of Platoon Leader (C-4, N=38)		
A NCO support	.32	.22	.46**	.39**	.15		
B Use of chain of command	.53	.29	.13	.02	06		
C Delegate tasks or respon- sibilities personally rather than through the							
chain of command	35	.28	.16	.09	.01		

 $<sup>^{</sup>a}N$  denotes number of platoons. The symbol \*\* indicates significance at the .01 level of confidence.

Although the NCO support variable, A, also had low reliabilities, it was correlated significantly with follower ratings both of leader and of platoon (C-1 and C-2), as expected.

In summary, the low indices of agreement within platoons and of internal consistency make the criterion relationships of the NCO Use and Support variables difficult to interpret. There are indications, however, that the extent to which a platoon leader overtly supports his NCO's is importantly related to his followers' evaluations of his leadership ability and the quality of the platoon.

#### Area VII: Other Leader Behaviors

This area contains leader behavior variables that could not properly be grouped under any of the preceding behavior areas. These variables, shown in Table 8, form a heterogeneous group. However, it is interesting to note that the highest correlation with leader rating by subordinates (C-1)—.85, significant far beyond the .001 level—occurs in variable D of this group, "Making good plans and decisions and displaying tactical proficiency." Four of the remaining eight variables are correlated with C-1 at about the same magnitude as those in Area IV, Handling

Table 8

Leader Behaviar Variables, Area VII: Other Leader Behaviars

	Relia	bilities	Validities <sup>a</sup>			
			Subordinate	es' Ratings	Superior's	
Variable	Îtems	Respondents	Of Platoon Leader (C-1, N=46)	Of Platoon (C-1, N = 46)	Rating of Platoon Leader (C-4, N=38)	
A Introducing new men			-			
to plateon	.88	.38	.23	.16	.29	
B Maintaining upward						
communication within	4.77	0.0	4.7 **	10	.39*	
platoon	.47	.39	.46**	.12	.39"	
Responding appropriately	44	.13	.53***	.16	.14	
to suggestions	.44	.13	.50	.10	.14	
Making good plans and decisions and displaying						
tactical proficiency	.87	.56	.85***	.46**	.35*	
Being a good model of	.01	.00	.00			
military form and manner	.02	.27	.36*	.03	.24	
Admitting having made						
a mistake	.04	.11	.68***	.33*	.20	
G Getting shaken up by						
unexpected or stressful						
situation	.84	.66	7 <b>4***</b>	46**	33*	
H Failing to exert leader-						
ship function in confi-		_		a / ste ste	0.4*	
dent fashion	.44	. 45	7]***	46**	34*	
I Behaving consistently						
with respect to follower		4.4	.72***	.44**	.19	
expectations	.74	.44	. (Z***	• 44	.19	

aN denotes number of platoons. The symbol \* indicates significance at the .05 level of confidence; \*\* at the .01 level, and \*\*\* at the .001 level.

Disruptive Influences—all very high. These are F, "Admitting having made a mistake" (.68), G, "Getting shaken up by unexpected or stressful situation" (-.74), H, "Failing to exert leadership function in confident fashion" (-.71), and I, "Behaving consistently with respect to follower expectations" (.72).

These five variables also correlate significantly with the subordinates' rating of platoon (C-2), and three of the five correlate significantly with

superior's rating of platoon leader (C-4).

These relationships must be interpreted with extreme caution. As their titles indicate, many of the variables in this section are very similar in content to the platoon members' ratings of their platoon leader and are more evaluative than descriptive. This applies particularly to "Responding appropriately to suggestions" (C) and "Making good plans and decisions . . ." (D), on the one hand, and "Getting shaken up . . ." (G), and "Failing to exert leadership . . ." (H), on the other hand.

In the main, the items are not specific statements or descriptions of observable behaviors; they differ in this respect from the variables in the preceding six behavior areas. Moreover, in many cases, the judgments required are similar to those required in answering the criterion items. Hence, it is reasonable to expect that the high correlations between these variables and the criteria are a function of a strong "halo" effect. Consequently, interpretations of these variables in terms of their apparent content do not seem justifiable, and will not be made.

Variable A, "Introducing new men to platoon," differs from the others in this area in that its items are objective descriptions of specific behaviors. However, it seems not to be an important variable in Study II and theoretically should not be, because the sample was drawn from a division in training and all the men were "new men" except the cadre. Under these conditions, introductions of the type specified were

probably not in order.

#### Chapter 5

#### COMPARISON OF THE RESULTS OF STUDY II WITH STUDY I

To determine the degree to which the Leader Activities Questionnaire measures the leader behavior variables identified in the first study, a comparison of the two sets of results was undertaken.

#### FACTORS AFFECTING THE COMPARISON

As noted earlier, it was not possible to use in Study II a design which would permit rigorous eomparisons between the interview and questionnaire methods. The compromise design chosen was to replicate the earlier study, using the LAQ instead of interviews, and then determine the extent to which the earlier findings were repeated.

Unfortunately, the mechanics of making comparisons between sets of results are subject to individual differences in approach and interpretation. That is, if the detailed results in Chapter 4 were to be compared in one-to-one fashion with the detailed results of the first study, one observer might conclude that substantial similarity exists and that the LAQ is adequate for the purpose for which it was intended, while another observer might simultaneously conclude that the degree of similarity present is not adequate. Further, the two different observers might disagree, after such a one-to-one comparison, as to how much similarity actually did exist between the two sets of results.

Accordingly, it seemed advisable to attempt first a "rough" quantification of the degree to which the <u>in toto</u> results of one study parallel those of the other. If substantial over-all agreement were found, specific similarities and differences could then be discussed more meaningfully.

Because certain changes in emphasis occurred while the variables from the earlier study were being translated into paper-and-pencil form, not all of them were measured in their original form by the LAQ. Conversely, not all the variables in Study II had appeared as such in Study I. In all, 38 of the LAQ variables were judged to have counterparts in the original system that were the same or nearly the same. Of these, seven fall into three groups, each derived from a single Study I variable; two of the groups contain two derived variables, and one contains three. The remaining 15 variables of the 53 measured by the LAQ are sufficiently different in emphasis from their original counterparts to make any attempted comparisons misleading.

A number of difficulties arose during the attempt to make an over-all quantitative comparison of the two sets of results. The first

was the fact that three of the original variables were reflected in the LAQ by groups of variables. Single numbers had to be obtained to represent the combined validities of the variables in each group. As was the general case with the procedures described in this section, no definitive solution appeared. The compromise solution was to sum the validities within each of the three groups of LAQ variables, and then to correlate these three sums with the criteria.

The second problem was that several of the Study I significances had been determined through use of chi squares. Some of these chi squares were computed from 2x2 tables, which were based on median splits, and some from 2x3 tables. A ready conversion exists for determining phi coefficients from chi squares, but is applicable only when the chi square is computed from a 2x2 table. To obtain coefficients from these chi squares that would be at least somewhat comparable in range of magnitude with the correlations of the present study, all the 2x2 chi squares were converted to phi coefficients through use of the following formula:

$$\phi = \sqrt{\frac{\chi^2}{N}}$$

The 2x3 chi squares were not so simple. The following method was used to convert them to phi coefficients. First, Fisher's Tables¹ were used to calculate comparable chi squares with  $1 \ \underline{df}$ . An interpolation was made from the point on the  $2 \ \underline{df}$  curve at which the obtained value fell to the point on the  $1 \ \underline{df}$  curve at which a 2x2 chi square of the same significance would have fallen. Because the shapes of the distributions of chi square for one and two degrees of freedom are different, the computed values are not precisely representative of the values that might have been obtained had the original chi squares been computed from 2x2 tables. However, they are probably very close.

The only difficulty that was anticipated as a result of using the chisquare-to-phi conversion was that the distribution of phi coefficients is rarely from -1.00 to +1.00 as is the case for correlations computed from continuous data. This criticism does not apply to the phi coefficients computed from 2x2 chi squares, because these were all based on median splits. However, it is not known how this restriction may have operated in the case of those phi coefficients computed from 2x3 chi squares. In the absence of this information, the comparisons presented later in this chapter may be regarded as somewhat lacking in precision. However, since this ceiling on phi would operate to restrict the range of the computed values, the comparisons may be safely regarded as lower-limit estimates of the correspondence that actually exists between the two sets of results. That is, where a significant degree of relationship is found, it is unlikely that the degree of significance has been overestimated.

With two parallel sets of numbers in the form of correlation coefficients representing the two sets of results, the final problem was to obtain some estimate of the degree of correspondence between these

<sup>1</sup>R.A. Fisher and F. Yates, Statistical Tables for Biological, Agricultural and Medical Research, Hafner Publishing Company, Inc., New York, 1953.

two sets of numbers. A product-moment correlation was selected to provide this quantification.

#### FINDINGS

Four sets of validities are shown in Table 9-for each study, the correlations of the variables with platoon members' ratings of platoon leaders (C-1), and with superiors' ratings of platoon leaders (C-4) four correlations were obtained:

- (1) The C-1 validities from Study II and Study I were correlated to determine the extent to which corresponding variables had similar criterion relationships.
  - (2) Similarly, the two sets of C-4 validities were correlated.
- (3) The two sets of validities from the present study were correlated to determine the extent to which the same variables were similarly related to the two different criteria, C-1 and C-4.
- (4) Similarly, for comparison, the C-1 and C-4 validities from the earlier study were correlated.

Table 9

Comparison of Related Validities From Study II and Study I

	Validities b					
Variable <sup>a</sup>		ly II ider Ratings	Study l Platoon Leader Ratings			
	By Subordinates (C-1, N=46)	By Superiors (C-4, N=38)	By Subordinates (C-1, N=42)	By Superiors (C-4, N=42)		
1rea 1: Defining						
1. Defining clearly (I A7)	.68***	.26	.43** c	.57*** c		
2. Assigning work at a detailed level (I Al	.38**	.23	02	29†		
3. Specifying the roles of new men in						
the platoon and stating platoon						
policies (I D1)	.32*	.03	.37*	.08		
4. Stressing observance of military						
courtesy, good appearance (I C2)	. 28†	.15	.30†	.44**		
5. Specifying how and when work will						
later be evaluated (I E3)	.12	.02	.04 d	$14^{d}$		
6. Critiquing good and poor						
performance (1 F4)	.54***	.22	.30†	.05		
reall: Pre-Task Motivation						
1. Promising tangible rewards for						
good performance (II A3)	.18	.22	.38*	.24		
2. Appealing for good work perform-						
ance without naming tangible						
rewards (II B2)	.36*	.20	.47**	.23		
3. Threatening specific tangible						
punishment for poor future per-				2.0		
formance (II A4)	19	.06	23	20		
4. Warning against bad performance						
without specifying tangible	10	00	100	100		
consequences (II B4)	12	03	.10°	.10 c		
((	Continued) -					

Table 9 (Continued)

Comparison of Related Validities From Study II and Study I

	Validities <sup>b</sup>					
Variable <sup>a</sup>		ly II ader Ratings	Study I Platoon Leader Ratings			
·	By Subordinates (C-1, N=46)	By Superiors (C-4, N=38)	By Subordinates (C-1, N=42)	By Superiors (C-4, N=42		
Area III: Post-Task Motivation						
<ol> <li>Giving tangible rewards (III A9)</li> </ol>	.45**	.24)				
2. Promising tangible rewards for		}	.19°	.10°		
completed work (III A9)	.50***	.22)				
3. Praising man or men for good						
work (III B9)	.35*	.25	.30†	.02		
4. Total light punishment for				*		
poor performance (III A10)	24	.08)				
5. Total heavy punishment for		}	.09 d	.05 d		
poor performance (Ill A10)	02	.14)				
6. Blaming men for poor per-						
formance (III B10)	41**	06	16	18		
7. Blaming men in emotional or						
aggressive manner (VIII 1)	<b>46**</b>	.12	35*	30†		
8. Requiring correction of work						
done incorrectly (III E3)	09	.121				
9. Giving constructive extra						
duty (III E3)	08	.06	.33*	.08		
(Plus "Critiquing" from Defining Area)	.54***	.22				
10. Giving inappropriate or excessive						
punishment (III F3)	45**	.08	50***	10		
11. Failing to base rewarding-						
punishing actions on work						
performance (IV C4)	54***	.11	.37†e	.11 e		
Area IV: Handling Disruptive Influences						
<ol> <li>Maintaining welfare of men (V 1)</li> </ol>	.59***	.25	.40**	.07		
2. Taking action on problems and						
complaints (V 6)	.77***	.38**	.48**	.33*		
3. Protecting men from unfair						
treatment or excessive						
details (V 2)	.69***	.25	.30†°	.13°		
4. Helping men in difficult work						
situation (V 4)	.72***	.28*	NSf	NS f		
Irea V: Getting Information						
1. Checking reason for failure to						
perform assigned work (VI D2)	.30*	.08	.43**	.32*		
2. Asking NCO's for information				_		
or advice (VI A1)	.36*	.10	.35*	.18		
3. Asking men who are not NCO's				5		
for information or advice (VI A2)	.37*	.44**	.28†	16		
4. Discussing tasks with NCO's						
before deciding how they should						
be done (VI C1)	.52***	.25	.00	.00		
5. Checking performance of men on	=	0				
assigned tasks (VI D3)	.51***	.10	.22	.19		
	.01	•10				

Table 9 (Continued)

#### Comparison of Related Validities From Study II and Study I

	Validities b						
Variable <sup>a</sup>		dy II ader Ratings	Study I Platoon Leader Ratings				
	By Subordinates (C-1, N=46)	By Superiors (C-4, N=38)	By Subordinates (C-1, N=42)	By Superiors (C-4, N=42)			
Area VI: NCO Use and Support		•					
1. NCO support (VII A1)	.46**	.15	.27†c	.13 c			
2. Use of chain of command (VII C8)	.13	06	.04	.03			
Delegate tasks or responsibilities personally rather than through the chain of command (VII C2)  Area VII: Other Leader Behaviors	.16	.01	12 <b>e</b>	06 <sup>e</sup>			
Getting shaken up by unexpected     or stressful situation (VIII 2)	74***	33*	40** d	11 <sup>d</sup>			
Responding appropriately to suggestions (VI B4)     Being a good model of military	.53***	.14	.43** c	.43** c			
form and manner (I C1)	.36*	.24	.40**°	.33* c			
4. Behaving consistently with respect	.30	. 44	.40	.33" "			
to follower expectations (VIII 6)  5. Admitting having made a	.72***	.19	45** e	33* e			
mistake (VIII 3)	.68***	.20	.09 c e	.09 ce			

<sup>a</sup>Variables are stated in terms of Study II; letters and numbers in parentheses denote the Study 1 variables from which they were derived.

<sup>b</sup>N denotes number of platoons. The symbol † indicates significance at the .10 level of confidence; \* at the .05 level; \*\* at the .01 level, and \*\*\* at the .001 level.

CPhi coefficients computed from chi square values according to the formula:

$$\phi = \sqrt{\frac{\chi^2}{N}}$$

Chi squares were originally computed on the basis of median splits. Significances are indicated in terms of original chi squares.

dPhi coefficient computed from chi square values as above except that original chi squares had 2 df. This category was scored in the opposite direction from the one with which it is compared. Proper comparison requires reflection of the sign of the correlation.

Inspection of the scatter diagram gave evidence that no relationship existed. No statistic was

computed in this case.

The two sets of C-1 validities correlated .75. This indicates a very highly significant tendency for the same variables in each of the two studies to correlate similarly with platoon members' ratings of their platoon leader. From this, it seems reasonable to conclude that the LAQ variables have a very high degree of over-all similarity to the variables from which they were derived.

Unfortunately, this conclusion is equivocal. The two sets of C-4 validities correlated only .24, which would lead to the interpretation that only chance or near-chance similarities exist between the two sets of validities, and, perhaps, between the two sets of variables. On the other hand, the C-1 and C-4 validities from the first study correlated .76, and those from the present study correlated .70, highly similar relationships.

The key to this paradoxical set of findings probably lies in the differences between the two samples. The platoons in Study I were long-standing TOE units. In many cases, both the platoon members and the company commanders had known the platoon leaders for a substantial period of time, and about half these platoons had been through an Alaskan maneuver. In the present sample, the platoons were drawn from what in essence was a training division; the company commanders and platoon members had uniformly known the platoon leaders for shorter periods of time. In addition, they had known these platoon leaders under very different circumstances from those of the sample in the first study.

It is highly likely that the company commanders in each sample based their judgments of their platoon leaders in part on some visible subset of the leaders' follower-reported behaviors, in part on the platoons' performance (reactions to their leaders' interactive behaviors), and in part on leader behaviors which were not visible to the followers and which therefore were not reported and identified in the first study. Conversely, many of the measured behaviors were invisible to the company commander and therefore entered only indirectly, if at all, into his judgments of his platoon leaders. Further, it is very likely that the set of leader behaviors visible both to company commanders and to platoon members differed in the two samples because of the very different circumstances surrounding these two samples. Such a set of circumstances could produce C-1, C-4 correlations of .70 and .76, respectively, while the two sets of C-4 validities correlated only .24.

The very substantial degree of similarity between the two sets of results, when validities with C-1 are compared, permits the conclusion that the LAQ measures the original variables to a high degree, and that it therefore achieves the general objective for which it was constructed. Because of dissimilarities between the two samples, the failure of the C-4 validities to support this conclusion is not regarded as a sound reason for its rejection. Two questions may now be asked: '(1) What specific similarities and, particularly, differences exist between the two sets of C-1 validities? (2) What relevance do these similarities and differences have for leadership training?

As a corollary to question (1), it is legitimate to inquire why there should be differences at all. If all the LAQ variables are true measures of the original variables and if all were visible to platoon members in both samples, it seems reasonable to conclude that the extent of agreement might have been even higher than it was.

Perhaps the most reasonable hypothesis to explain the obtained difference is drawn from knowledge of the different characteristics of the two samples from which data were collected. In essence, it may be hypothesized that the behavior of the leader of an old, established platoon will be quilitatively different from that of the leader of a new platoon in

'It probably should be noted at this point that the variables measured by the LAQ were initially identified on the basis of the rationale that they might be importantly related to C-1. They are oriented toward communicative interaction that occurs between the platoon leader and his men. Even so, it is noteworthy that the patterns of relationships of these variables with criteria C-1 and C-4 were similar, although the levels of the criterion relationships were different.

training. In effect, this is almost a restatement of the environmental conditions surrounding these two types of platoons rather than a hypothesis.

For example, individual freedom is considerably more restricted in training platoons, and freedom of the post is limited. In this situation, the role of the platoon leader as a training taskmaster is enhanced, and his ability in this role may be considerably more critical to the over-all performance of the platoon. Since discipline may be more exacting in training platoons, the extent to which the platoon leader supports the formal structure of the platoon may be more important. Conversely, the greater stresses on the platoon members may produce greater and more numerous tensions so that the platoon leader's role as a source of help becomes correspondingly more fundamental. Indeed, knowledge that the platoon leader is "available" as a source of help may be a powerful palliative in itself.

It is difficult to estimate to what degree this very brief explication of the differential characteristics of the two samples is a secondguessing of the data or is a legitimate framework for interpreting the differences that were obtained. Examination of the two sets of C-1 validities in Table 9 makes recourse to these sample differences

as an explanation very attractive.

In Table 10 the differences between the corresponding Study II and Study I validities of selected variables with subordinates' and superior's ratings of the platoonleaders (C-1 and C-4) are summarized in terms of the standard errors of the differences. In all cases, to compute the critical ratios, the correlations were converted to  $\underline{z}$  scores and the differences divided by the standard error of the difference between the two z scores. Although not all were significant, all critical ratios larger than 1.00 were included in the table, 15 in the C-1 column and 12 in the C-4 column (only five involved the same variable for both columns).

Although 12 of the 35 differences between the two sets of C-4 criterion relationships were greater than their standard errors, only two were significantly larger. Since no good rationale exists for explaining the two significant ratios that did occur, it seems likely that

these may be largely due to chance.

However, with respect to the C-1 validities, the rationales outlined previously seem to apply. Three of the Defining variables  $(1,2,\ \mathrm{and}\ 4)$ had differences larger than their standard errors; two of these were from the three non-specific level Defining variables. Although none of these was significant, the differences were all in the direction of larger validities in the present study. This conforms to the prediction that the platoon leader's defining functions are more important in the training situation than in the operational situation.

Three Post-Task Motivation variables also had differences larger than their standard errors. Although the variable for positive, intangible post-task motivation ("Praising man or men for good work," 7) did not correlate substantially differently with the two C-1 criteria, "Positive, tangible post-task motivation" (6) did, again according to expectation. Further, the four variables under Handling Disruptive Influences (11,12,13, and 14) were more importantly related to the C-1 criterion in Study II than in Study I. This also is predictable from knowledge of the differences between the two samples used.

Table 10

Differences Between Validities.

of Selected Variables From Study II and Study I

		Valid	ities		Critical I	{atios "
Variable	Study II Platoon Leader Ratings		Study I Platoon Leader Ratings		Platoon Leader Ratings	
	By Subordinates (C-1)	By Superiors (C-4)	By Subordinates (C-1)	By Superiors (C-4)	By Subordinates (C-1)	By Superiors (C-4)
. Defining clearly	.68	.26	.43	.57	1.67	-1.63
<ol> <li>Assigning work at a detailed level</li> </ol>	.38	.23	02	29	1.90	2.27*
<ol> <li>Stressing observance of military</li> </ol>						
courtesy, good appearance	.28	.15	.30	.44		-1.37
l. Critiquing good and poor performance	.54	.22	.30	.05	1.31	
<ol> <li>Threatening specific punishment for poor future performance</li> </ol>	19	.06	23	20		1.12
<ol> <li>Positive tangible post-task motivation</li> </ol>	.50	.24	.19	.10	1.63	
7. Praising man or men for good work	.35	.25	.30	.02		1.03*
B. Negative tangible post-task motivation	16	.11	.09	.05	-1.13	
<ol> <li>Blaming men for poor performance</li> </ol>	41	06	16	18	-1.27	
O. Blaming men in emotional or aggres sive manner	46	.12	35	30		1.85
<ol> <li>Maintaining welfare of men</li> </ol>	.59	.25	.40	.07	1.18	
<ol> <li>Taking action on problems and complaints</li> <li>Protecting men from</li> </ol>	.77	.38	.48	.33	2.26*	
unfair treatment or excessive details	.69	.25	.30	.13	2.44*	
<ol> <li>Helping men in dif- ficult work situation</li> </ol>	n .72	.28	.00	.00	4.12**	1.24
<ol> <li>Checking reason for failure to perform assigned work</li> </ol>	.30	.08	.43	.32		-1.07
<ol> <li>Asking men who as not NCO's for info mation or advice</li> </ol>	re r- .37	.44	.28	16		2.70
<ol> <li>Discussing tasks with NCO's before deciding how they</li> </ol>		-	5 .00	.00	2.62**	* 1.15
should be done	.52	.25	.00	.00	2.02	2.4-

Table 10 (Continued)

### Differences Between Validities of Selected Variables From Study II and Study I

Variable		Validities				Critical Ratios a	
	Study II Platoon Leader Ratings		Study I Platoon Leader Ratings		Platoon Leader Ratings		
	By Subordinates (C-1)	By Superiors (C-4)	By Subordinates (C-1)	By Superiors (C-4)	By Subordinates (C-1)	By Superiors (C-4)	
18. Checking perform- ance of men on assigned tasks 19. Getting shaken up b	.51 y	.10	22	.19	1.54		
unexpected or stressful situation 20. Responding appro-	74	33	40	11	-2.40*		
priately to suggestions 21. Behaving consistently with respect	.53	.14	.43	.43	-	-1.37	
to follower expectations	.72	.19	.45	.33	1.95		
22. Admitting having made a mistake	.68	.20	09	09	4.16**	1.24	

"The differences between validities in Study II and Study I (converted to z scores), divided by the standard errors of the differences. The symbol \* denotes significance at the .05 level; \*\*, at the .01 level.

Two of the five remaining differences also fit into the rationale presented earlier. Insofar as "Discussing tasks with NCO's" (17) and "Checking performance of men" (18) are related to the platoon leader's defining function, their greater validities in the present study are reasonable.

The other three, in the miscellaneous area, do not fit readily into the explanatory framework used above. These are "Getting shaken up by unexpected or stressful situation" (19), "Behaving consistently with respect to follower expectations" (21), and "Admitting naving made a mistake" (22). Nevertheless, it appears reasonable to attribute most of the differences in the two sets of results to differences between the samples. These differences are interpreted to be primarily a function of the length of time the platoons had been operational and the consequent nature of the platoon goals at the time of testing.

One additional point of comparison between the two sets of validities is that the Study II correlations of the variables with C-1 are generally higher than those from Study I, although the corresponding correlations with C-4 are not. There are several reasons why this might be the case. One possibility is that the LAQ variables are more reliable than their parallels in Study I, because with the LAQ all platoon members contacted had a chance to respond to the same behavior statements. A second is that this is a manifestation either of proximity or of halo errors—artifacts of the paper-and-pencil questionnaire method of gathering data. At present, it is not possible to choose between these alternatives, or others which may be equally plausible.

### Chapter 6 DISCUSSION

The high degree of over-all correspondence between the results of this study and the earlier study supports the conclusion that the LAQ provides valid measures of the leader behavior variables. In addition, the present study constitutes a cross-validation of the findings of the first study. However, interpretations of the findings and their implications for training must be made cautiously. The following discussion assesses these implications.

#### FACTORS AFFECTING RESPONSES

In a correlational design of the type used in this and the previous study, three distinct possibilities might account for high associations between followers' descriptions of leader behavior and their judgments of leader competence:

(1) The followers might have observed the platoon leader from an initially neutral point of view, forming opinions as to how capable he was as a leader through observation of behaviors measured largely or entirely by the LAQ; that is, if he did the things that good leaders do, then he was judged to be a good leader. Observation of leader behavior would then have led to or "caused" the judgments of leader ability. In effect, the obtained validities in this case would be regarded as "true" validities.

(2) As above, the followers might have observed the leader from an initially neutral point of view, but might have formed initial opinions of leader capability as a result of observing behaviors or other raw perceptual data which were not included among the LAQ variables. This is to say that judgments of leadership ability may be based on variables not measured, but that leaders who are judged "good" also either spuriously do, or are thought to do, in greater frequency the LAQ behaviors that are "good." This would mean that the relationships between the LAQ variables and the criteria are spurious and that the LAQ variables may not constitute a valid content for training leaders.

(3) The followers might have formed initial judgments of leader capability, as in alternative (1), from observation of behaviors classified into the LAQ system. However, once these tentative judgments had been made, the followers might then have tended to perceive selectively those behaviors congruent with their initial judgments. In this case, the leader behaviors reported on the LAQ would more likely be "good" if the leader was judged to be "good" and "bad" if the leader was

judged to be "bad." This would be the result not of deliberate distortion in reporting, but rather of selectively forgetting, or failing to perceive initially, the "bad" behaviors of "good" leaders, and vice versa. This type of process has been described by Festinger as cognitive dissonance reduction, that is, the individual reduces tensions in his field of awareness by eliminating in one manner or another certain information that conflicts with other information, beliefs, and so on. This process would produce spuriously high relationships between the LAQ variables and the criteria. However, if the determiners of the initial judgments of leader capability were LAQ variables, these variables would still form a generically valid content for leadership training, although their correlations with the criterion would not be an indication of how importantly they actually are related to follower judgments of leadership ability.

It seems highly unlikely that alternative (2) is a factor because of the manner in which the variables were identified originally. In the first study, platoon members were interviewed individually and asked to give anecdotal accounts of their leaders' behaviors in certain standard situations. One valuable characteristic of this method of data collection is that it can generally be relied upon to identify almost all the relevant behaviors that occur with significant frequency. This would make it highly unlikely that a significant set of unmeasured leader behavior variables exists.

It seems far more likely that either, or both, of alternatives (1) and (3) account for the criterion relationships of the LAQ variables. Although it is difficult to determine the extent to which this is the case, there is a substantial amount of current thinking in the field of interpersonal perception which is relevant to the problem.

As Heider<sup>2</sup> has noted, interpersonal perceptions are dependent on three sets of characteristics—those of the person being perceived, the situation in which perception occurs, and the perceiver. Among the characteristics of the perceiver are sets of meanings that become attached to the raw perceptual data in the formation of a percept. These meanings not only determine in large part the percept, or interpretation of the raw perceptual data that the perceiver makes; they may also largely determine those raw perceptual data to which the perceiver is sensitive.

The initial opinions held of a leader by his followers must certainly fall into the category of "meanings." It is therefore reasonable to expect that some process akin to that described in alternative (3) operates in the leadership situation, and must affect the reports that followers make about their leaders.

Perhaps of even greater importance, this process of selective perception and selective recall must also have considerable weight in the <u>determination</u> of a follower's eventual opinions about his leader. That is, its effect on leader description is probably almost incidental to more important effects which may be central to the process through

<sup>&</sup>lt;sup>1</sup>L. Festinger, A Theory of Cognitive Dissonance, Row, Peterson, Evanston, Ill., 1957. <sup>2</sup>F. Heider, The Psychology of Interpersonal Relations, John Wiley & Sons, Inc., New York, 1958.

which a leader gains control over his men and wins their confidence. Recognition that this phenomenon occurs must focus attention on the extreme importance of the early interactions between a leader and his follower. In a sense, it is theoretical validation of a long-standing principle of naive psychology: If a man makes a good <u>first</u> impression on someone, he is disproportionately better regarded than a man who makes

a bad first impression.

However, a first impression is not enough. Although a follower will form initial opinions of his leader on the basis of a few observations—perhaps as a help in ordering his perceptual environment—he will maintain a check on whether his initial opinions continue to correspond with the objective world. If current perceptions run counter to initial opinions, at first there will be a strong tendency for the current perceptions to be discounted; indeed, if only a few events in the objective world run counter to the perceiver's initial opinions, these events may never actually be pereeived.

But a series of events that conflict with the perceiver's opinions or beliefs will not be ignored. In the face of continuing objective condence that his initial opinions or percepts were in error, he will eventually reformulate these so that his opinions and his perceptions are in accord. Thus, to the extent that he can, he will attempt to make his perceptions conform to his opinions and beliefs; when he no longer can do this, he will make his opinions and beliefs conform to his perceptions.

A good first impression is undoubtedly of great importance; but the leader must continue to do the things that led to the good first impression, or that impression will be modified to fit the reality of the situation. It is highly likely that the LAQ variables constitute, or include, most of the perceptual events that are important in confirming or altering the initial opinions followers form about their leaders.

#### IMPLICATIONS FOR TRAINING

It has been suggested that the first interactions a platoon leader has with his followers may be highly critical and disproportionately important determiners of his followers' subsequent evaluations of his leadership capability. Also, it has been assumed that the leader behavior variables found to be valid in this and the earlier study probably constitute by far the largest part of those factors on which followers base their judgments of their leaders. The possible presence of later distortion has not been regarded as a challenge to the generic validity of these behaviors as determiners of how good a platoon leader's leadership is perceived to be.

It can therefore be concluded that if a junior officer is cognizant of these behaviors and, more particularly, has been given specific training in their practice in a platoon-like situation, he will have a substantially better chance of performing effectively as a leader both initially and over the long period. The general nature of the findings indicates that the leader must be able both to recognize the demands of situations requiring action on his part and to respond appropriately to them.

A leader training program must therefore have two goals: (1) It should teach student officers a repertoire of behaviors for use, as appropriate, for many situations, and (2) it should teach them to recognize the demands of a given situation and to determine the probable effects of their choice of actions on others in each different situation the y encounter.

What, then, are the behaviors which, according to the research,

should be taught to students of leadership?

Three types of behavior seem very important in both studies:

(1) Defining at an Instructive Level. This is more importantly related to subordinates' ratings of platoon leaders (C-1) in the present study than in the earlier one, but in both it seems important that the platoon leader give information to his followers about their performance in a clearly understandable manner. The purpose of this instructive critiquing is to enable platoon members to do the job better the next time it must be done. This, of course, relates to one of the primary goals of

the platoon, good performance. (2) Appropriate Use of Reward and Punishment. This generally means that the highly regarded platoon leader both praises and tangibly rewards good performance, and that he appropriately punishes poor performance, especially when it results from motivational failure. It is likely that the highly regarded platoon leader will use tangible punishment such as constructive extra duty, and intangible punishment directed toward the inadequacy of specific performance, rather than punishment that impugns the personal worth or integrity of the individual. In addition, the appropriate use of reward and punishment implies that the platoon leader checks the performance of his men and determines the cause of failure before administering punishment. It is especially important that he distinguish between motivational failure and ability failure.

(3) Handling Disruptive Influences. The extent to which the leader can be depended upon for help when needed is importantly related to platoon members' judgments of the quality of his leadership. Further, in both studies the platoon leader who was easily accessible to his men

was more highly regarded than the one who was not.

In the present study, two additional areas of importance were found. One of these is the area of NCO Use and Support. The highly regarded leader both used his NCO's and supported their decisions. However, this did not preclude activities which were directed by the platoon leader toward getting information from men in his platoon who were not NCO's. These information-getting activities, or variables, form the second additional group of important relationships found in Study II.

#### SUMMARY

In brief summary, the findings of this study confirm the findings of the earlier research and provide well-defined objectives for leadership training, as well as a method for diagnostically evaluating the effects of training. The content of the findings describes a functional role for the leader which is consistent with social learning principles. The role emphasizes appropriate leader actions and reactions with reference to group performance and to factors which may disrupt group performance.